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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,642	06/20/2001		Darrell W. Kelsoe	4543	
38642	7590	04/06/2006		EXAMINER	
WILEY HO			CAMERON, ERMA C		
215 SOUTH 2ND FLOOI		E STREET		ART UNIT	PAPER NUMBER
TALLAHAS	-	32301	1762		
				DATE MAILED: 04/06/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Con

		Application No.	Applicant(s)	
	· ·	09/885,642	KELSOE, DARRELL W.	
	Office Action Summary	Examiner	Art Unit	
		Erma Cameron	1762	
Period fo	The MAILING DATE of this communication ap r Reply	pears on the cover sheet w	ith the correspondence a	ddress
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Status			•	
2a)⊠ 3)□	Responsive to communication(s) filed on <u>17 J</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for alloward closed in accordance with the practice under the pra	s action is non-final. ance except for formal mat	·	e merits is
Dispositi	on of Claims			
5)□ 6)⊠ 7)□	Claim(s) <u>132-140,142-148 and 152-160</u> is/are 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) <u>132-140, 142-148, 152-160</u> is/are rej Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	wn from consideration.	<b>).</b>	
Applicati	on Papers			
10)	The specification is objected to by the Examina The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E	cepted or b) objected to drawing(s) be held in abeya ction is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 C	
Priority u	nder 35 U.S.C. § 119			
a)[	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority documen  2. Certified copies of the priority documen  3. Copies of the certified copies of the priority documen application from the International Burea see the attached detailed Office action for a list	ts have been received. ts have been received in A prity documents have been au (PCT Rule 17.2(a)).	Application No  received in this Nationa	l Stage
Attachment		() ☐ Inter	Summon (PTO 442)	
2)  Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 No(s)/Mail Date	Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application (PT	O-152)

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#### **DETAILED ACTION**

#### Response to Amendment

1. Applicant's arguments filed 1/17/2006 have been fully considered but they are not fully persuasive.

#### **Drawings**

- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:
  - a) The Brief Description of the Drawings does not agree with the drawings themselves. The Description contains Figures 6a, 6b and 6c, whereas the drawings are labeled 6, 6a and 6b.
  - b) The specification discusses Figures 6a, 6b and 6c, but not Figure 6.
  - c) Figure 13: 6 and 8 are not described in the specification.
  - d) Figure 14 is referred to on page 30 as portraying chemical reactions. However, Figure 14 appears to be a piece of equipment.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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### Claim Rejections - 35 USC § 112

3. Claims 132-140, 142-148 and 162-160 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The following is new matter.

Claim 132	allowing a solute compound to be drawn from the solution
Claim 132	acid generating reaction within the wood
Claim 132	the acid catalyst is produced by a molecule producing an acid
Claim 132	after the application to water in the wood cellulose
Claim 133	reactingonly upon contact
Claim 135	acid catalystreacts with water in the wood
Claim 140	strong acid
Claim 157	pKa below 2.5
Claim 158	(Kow) less than 10.1
Claim 159	(Kow) less than 1.0
Claim 160	(Kow) less than 0

The applicant is requested to cancel new matter.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:ct

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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- 5. Claims 132-140, 142-148 and 152-160 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- a) Claim 132: it is not clear what is meant by "acid catalyst produced by a molecule producing an acid".
- b) Claims 136 and 137: both contradict claim 132.
- c) Claim 140: strong has not been defined and is therefore vague and indefinite.
- d) Claim 142: it is not clear what is meant by "in situ the wood".
- e) Claims 144, 145, 147: it is not clear why solvents is plural. Is more than one solvent required.
- f) Claims 138, 139, 142, 144, 145, 146, 147, 148: the basis of % is not stated, and therefore the amounts are vague.
- g) Claims 144-145: both contradict claim 132, which requires that an organic solvent be present.

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h) Claim 147:

contradicts claim 145 on which it is dependent.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 132-140, 142-148 and 152-160 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 08-318509.

'509 teaches impregnating wood (which may be humidified (page 13 of translation)) with an alcohol or acetone solution (p13) comprising a metal oxide, trimethoxy silane (p 22) and an acid catalyst (p 14, 16). The silane condenses with itself and/or reacts with the hydroxyl of the wood (p 8). The wood has fire retardant properties (p 8). The property of the silane reacting with the wood to produce heat would be inherent to the reaction.

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#### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erma Cameron whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ERMA CAMERON PRIMARY EXAMINER Erma Cameron Primary Examiner Art Unit 1762

April 3, 2006